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PENSOFT

First record of the Sungrebe, *Heliornis fulica* (Boddaert, 1783) (Gruiformes, Heliornithidae), from Piauí, northeastern Brazil

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Abstract

This study presents the first record of the Sungrebe *Heliornis fulica* for the state of Piauí in northeastern Brazil, a first sighting also in a Cerrado/Caatinga ecotone. On 19 December 2014, a female Sungrebe was collected by a local fisherman in the Corrente River located between the towns of Capitão de Campos and Piripiri in the northcentral part of the state of Piauí.

Key words

Ecotone; Parnaíba River watershed; Corrente River; aquatic bird; geographic distribution; conservation.

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Introduction

The family Heliornithidae includes only 1 species, *Heliornis fulica* (Boddaert, 1783), which is widely distributed throughout the Neotropical region but apparently with low population densities (Bertram and Kirwan 2017). Its preferred habitats are quiet forest streams and rivers, and freshwater ponds and lakes, with overhanging riparian vegetation. These aquatic birds tend to swim near the vegetation hanging from the river banks, taking refuge under it at the first sign of danger. They feed on aquatic insects and their larvae, as well as beetles, ants, spiders, crustaceans, amphibians, and small fish. Sungrebes are difficult to observe in their natural habitat, due to their inconspicuous color pattern and secretive behavior (Ingels and Tauleigne 2011). Sometimes when disturbed from their roosts at night, they are caught in fishing nets (Sick 1997).

The state of Piauí has an extensive ecotone zone at the intersection of the Amazon Forest, Cerrado (Neotropical savanna), and semiarid Caatinga (deciduous, thorny, dryland vegetation), and it represents the largest phytoecological domain in the Parnaíba River watershed (Sousa et al. 2009). Due to the climatic complexity of the region and its habitat heterogeneity, this ecotone zone harbors many bird species (Gonçalves et al. 2017) and has been surveyed since the beginning of the 20th century (Hellmayr 1929, Pacheco 2004). Surveys are now more intense within conservation areas (Novaes 1992, Olmos 1993, Zaher 2001a, 2001b, Santos 2001, Olmos and Albano 2012, Santos et al. 2012, Silveira and Santos 2012, Guzzi 2012), as well as in less-protected sites (Santos 2004, Olmos and Brito 2007).

Although numerous studies in recent years have focused on the birds of Piauí, there are no records of

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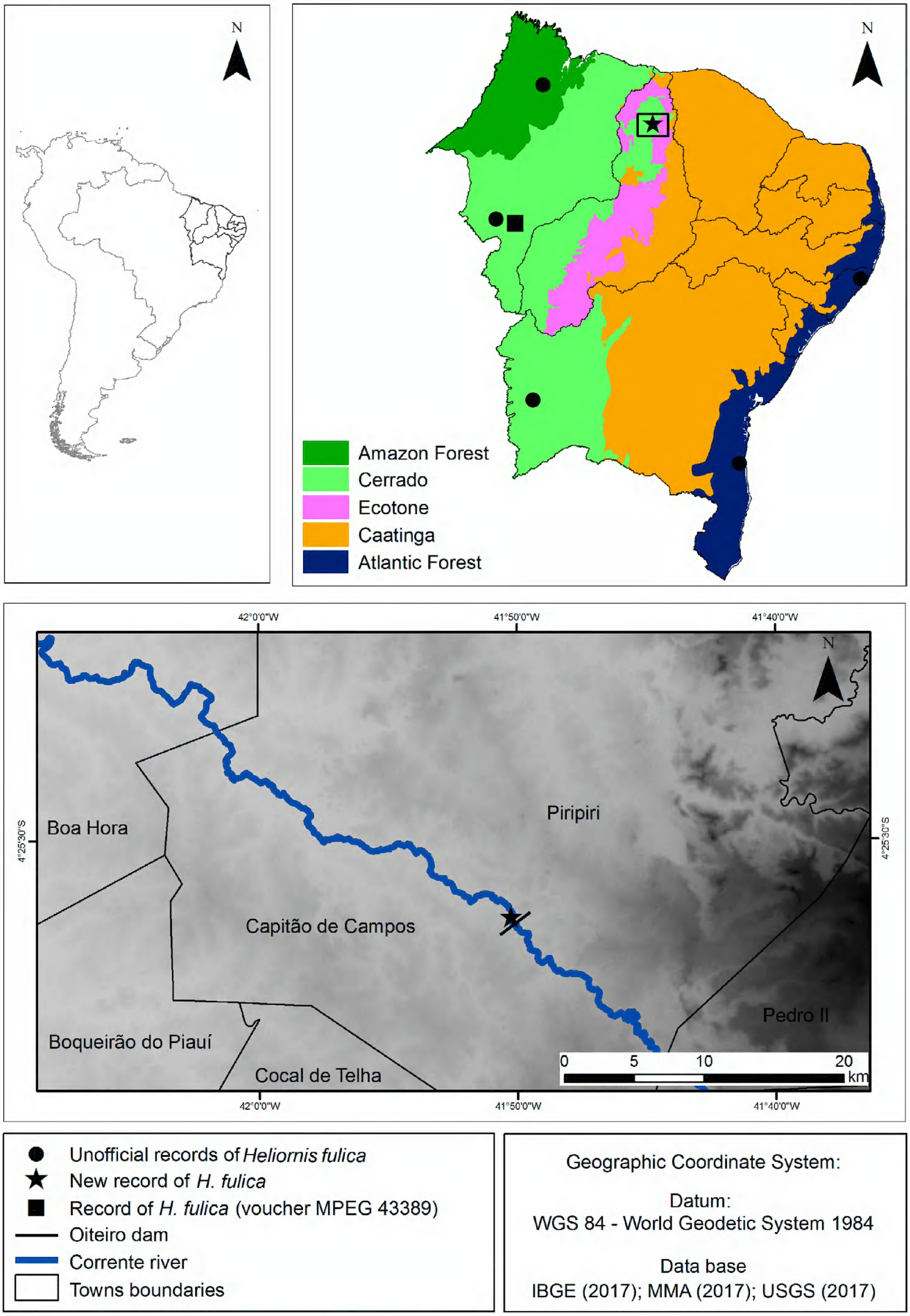
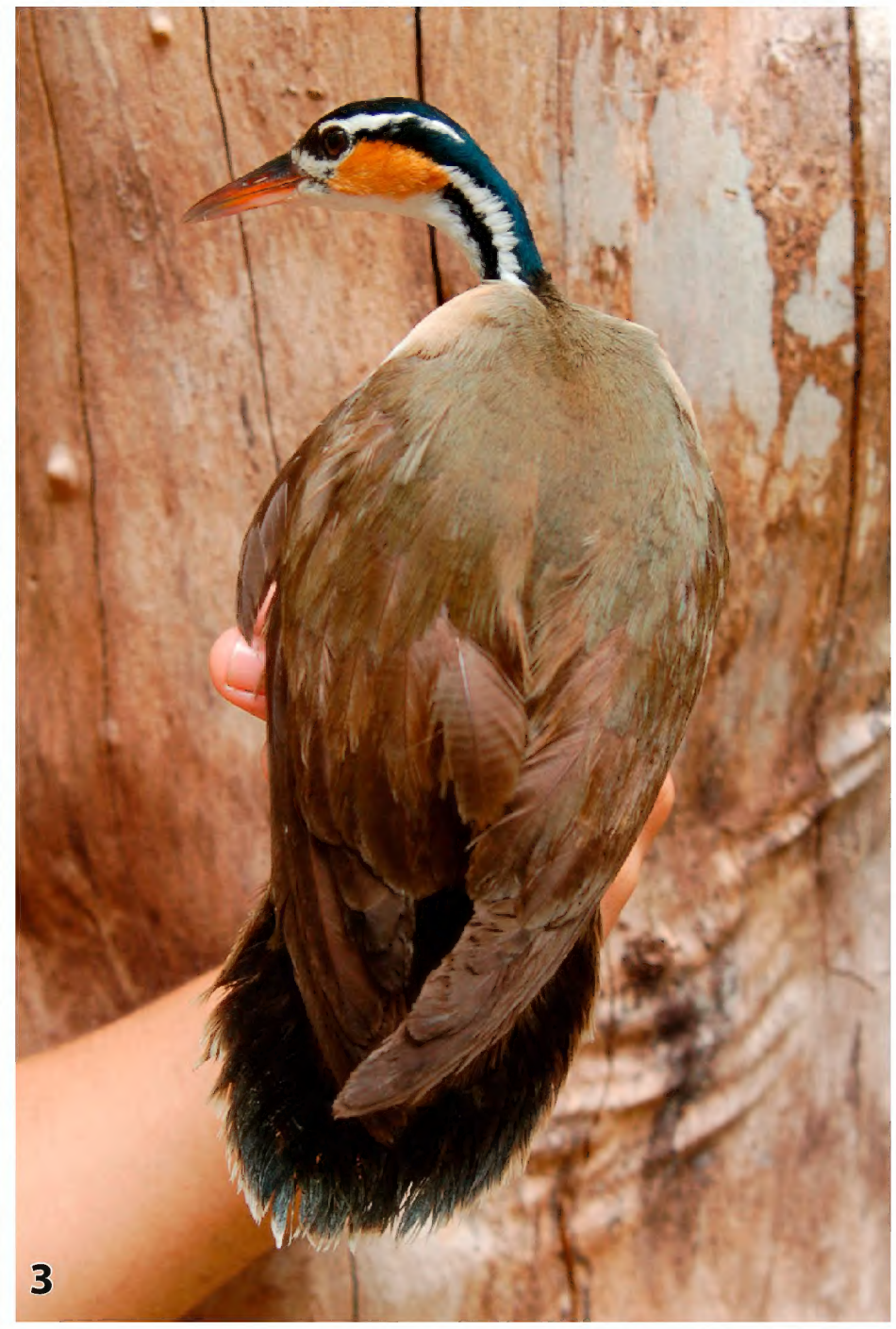


Figure 1. Map showing new record of *Heliornis fulica* from a section of the Corrente River located between the towns of Capitão de Campos and Piripiri, north-central Piauí in a Cerrado/Caatinga ecotone and other records from northeastern Brazil.



Figures 2, 3. The female specimen of Sungrebe *Heliornis fulica* collected by a local fisherman in the Corrente River located between the towns of Capitão de Campos and Piripiri in the northcentral part of the state of Piauí, Brazil. **2.** Side view. **3.** Dorsal view. Photographs by A.B. Silva.

the occurrence of *H. fulica*. As such, the present study reports the first record of the Sungrebe for that state, a first sighting also in an ecotone area (Cerrado/Caatinga). Additionally, this record extends the known range of that species towards the interior of northeastern Brazil.

Methods

The region where the specimen of *H. fulica* was collected is situated in an ecotone zone (Rivas 1996) at the confluence of Cerrado and dryland Caatinga vegetation (Jacomine et al. 1986) (Fig. 1). The climate is hot and semiarid, presenting 6 months of drought and has an average annual rainfall of 800–1000 mm, with the heaviest rains occurring between January and March (CODEVASF 2006). The average annual minimum and maximum temperatures of are 22 °C and 33 °C respectively (Lima 2002).

Results

On 19 December 2014, a Sungrebe *H. fulica* was collected by a local fisherman in a section of Corrente River located between the towns of Capitão de Campos and Piripiri in northern-central Piauí, Brazil. According to the fisherman, the Sungrebe was captured about 200 m downstream of the Oiteiro dam (04°28′37″ S, 041°50′11″ W) (Fig. 4), in the Longá watershed. The specimen was brought to the Center for the Reception of Wild Animals (CETAS) of the Brazilian Institute of Environment and Renewable Resources (IBAMA) of the state of Piauí, for release back into nature later.

The characters that aided in the identification of this Sungrebe, a female, were: head and neck strikingly

Figure 4. Corrente River between the towns of Capitão de Campos and Piripiri in north-central Piauí, Brazil, where the female specimen of *Heliornis fulica* was collected about 200 m from the Oiteiro dam by a local fisherman. Photograph by A.B. Silva.

marked black and white, cinnamon cheeks typical for a female, red eye-ring, and reddish maxilla (Mata et al. 2006) (Figs 2, 3).

Discussion

There are few records of *H. fulica* for northeastern Brazil (e.g., Oren and Roma 2011). One specimen deposited in the Paraense Emílio Goeldi Museum (voucher MPEG 43389) was collected in Balsas, state of Maranhão, Brazil. Unofficial records (not found in the scientific literature) of *H. fulica* can be found on WikiAves (2017): the town of Passo de Camaragibe (Alagoas state); the towns of Ilhéus and São Desidério (Bahia state); and the towns of Riachão and Penalva (Maranhão state) (Fig. 1). The absence of records of *H. fulica* in other parts of the state of Piauí and northeastern Brazil may be due to a lack of detailed observations in areas with appropriate habitat.

Although *H. fulica* has high habitat specificity (Stotz et al. 1996), it conservation status was categorized as Least Concern due to its extremely wide range and large numbers, as well as populations trends that do not appear to be rapidly decreasing (Birdlife International 2016). However, defaunation caused by habitat destruction (Hoffmann et al. 2010, Dirzo et al. 2014) has motivated actions directed toward its conservation. Some populations of *H. fulica* in Brazil's Atlantic Forest and Amazon regions are considered Vulnerable (Silva et al. 2008, Pacheco et al. 2010, Oren and Roma 2011) or Critically Endangered (CONSEMA 2011) and therefore are conservation priorities.

The region where the new record of *H. fulica* was found is in an advanced state of environmental degradation, principally due to ecosystem fragmentation resulting from farming and cattle raising. Additional anthropogenic threats to forest remnants are burning and bushmeat hunting. Thus, actions to protect towards those natural habitats are extremely important to the continued presence of this species in Piauí.

This first record of *H. fulica* from Piauí helps to fill a gap in the geographic distribution of this species in northeastern Brazil and suggests that the distribution of *H. fulica* is considerably wider than believed. The new data increases is a useful contribution to the conservation of this aquatic bird species.

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Authors' Contributions

LMSS and ABS collected the data, LMSS identified the specimen; LMSS, ABS and AG wrote the text.

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